Carbon Reduction Policy Action Plan

Key / Guide	
Green	Already Implemented or in progress. No issues.
Amber	Proposed but not already implemented. No significant issue.
Red	Likely to be an issue - such as funding or other agreement and has significant risk associated.
M1-14	Carbon Management Measure
T1-10	Technical Measure
F1-3	Financial Measure

Notes

An annual report will be taken to Cabinet outlining the progress in delivery of the Action Plan against the targets detailed within the main Carbon Reduction Policy document, together with recommendations for further improvements. A review of the Action Plan will be undertaken at this time.

Action		Owner	Impact	Priority	Time scale	Setup Cost	Running Cost	Funding Source	CO2 saving	Status	Notes
Defining our responsibility / Carbon Management											
M1	Adopt & Implement Carbon Reduction Policy (CRP)	Council	High	High	Jan-10	N/A	N/A	N/A	40% by 2020 (4% per annum)	Amber	Contains CO2 reduction targets that meet the anticipated future requirements of CRC. 40% reduction by 2020. 2008/2009 as the baseline level year.

M2	Implement awareness raising campaign	Sustainability Team / CRC Contacts / Comms	High	Medium	Ongoing	£0	£0	N/A		Green	Implement a campaign with the possibility of having: info in induction packs, how to be energy efficient training programme, tips on intranet, achievements on website, email alerts, energy contacts, energy workshop, stand in main reception, energy advice pamphlets and publicity materials such as a Green Work Handbook, green worker reward scheme, procurement event with local green energy providers, staff awareness tested through survey monitoring attitudes and actions towards carbon reduction
M3	Identify and appoint service area CRC Contacts	All Services	Medium	Low	Apr-11	£0	£0	N/A		Amber	Defining roles at member level and within services. CRC Contacts appointed from each service area to be responsible for providing energy data and taking ownership for carbon management. PCOT members given data responsibility initially.
M4	Set building and service area targets	Jason Taylor, All Services	Medium	Low	Apr-11	£0	£0	N/A		Red	These targets will be based on those stated within the Carbon Reduction Policy. It may not be possible to set targets accurately until March 2011 or until 12 month data is available
M5	Establish service area carbon reduction plans	All Services	High	Low	Apr-11	£0	£0	N/A		Red	This plan will provide a series of actions each service area will carry out to deliver its reduction targets. Sports & Recreation are the only service to date who have such a plan.
M6	CO2 reduction targets embedded in directorate and service area business plans	All Services	Medium	Low	Ongoing	£0	£0	N/A		Red	As well as CRC becoming embedded in the council's policy framework it needs to be absorbed in each service areas annual business plan process. Business Plans or Group Plans to identify contribution to carbon reduction
M7	Review of progress being made against carbon reduction targets by PCOT & COMT	Senior Management	Medium	Medium	Ongoing	£0	£0	N/A		Amber	Senior Management also routinely consider and remove barriers to CO2 reduction
Improve Monitoring & Assessing our progress											

M8	Centralise the CRC application procedure	Jason Taylor	High	High	Jun-10	N/A	N/A	N/A		Green	Ensure that all half hourly electrical sites know that this is being co-ordinated by the Energy Manager
M9	Conduct a total utility meter audit across all SCC operations covered by CRC	Service Areas, Centrally Managed by Jason Taylor and Bhadresh Pathak	High	High	Jan-10	N/A	N/A	N/A		Amber	This will involve assessing meters at each site and logging data such as location, meter read, photo of meter, type of units read and meter serial numbers. This will identify & reduce risks. It will also provide a good grounding for CRC and energy management purposes.
M10	Set up monthly service area reporting of data from energy meters	Service Areas, Centrally Managed by Jason Taylor & Bhadresh Pathak	High	High	Jan-10	N/A	N/A	N/A		Amber	Data essential for CRC and Display Energy Certificates (DECs) along with NI185 and NI194 compliance. Results will be used to feed into monthly or quarterly diagnostic reports for each area. Possibility for internal performance league system.
M11	Collect, analyse and report CO2 emissions data	Bhadresh Pathak	High	High	Ongoing	N/A	N/A	N/A		Red	A Data Analyst has been employed on temporary PDG funding. Permanent post required to collect, analyse and report energy / carbon emissions data.
M12	Purchase specialist energy management software package to enable accurate data to be available	Jason Taylor and Bhadresh Pathak	High	High	Jan-10	£22k	£1350 per annum	Salix / Sustainability Budget		Green	Systems Link energy management software package has been purchased to capture and report invoice, meter reading and half hourly data from meters. All sites and meter data is fully covered. Additional web-based package has been purchased to enable individual sites to input meter readings and see their own energy data online
M13	Continue to purchase and install automatically read meters (AMRs) through the next energy supply procurement	Jason Taylor	High	Medium	Ongoing	Annual £90 per utility meter installed	Annual £90 per utility meter installed	Via Sites Energy Bills		Green	This will provide accurate billing and therefore an easily auditable and accurate form of energy data. Installation of AMRs prior to the CRC application process will score points and improve the council's position on the CRC league table
M14	Report through CorVu	Helen Krzanowski	Low	Low	Ongoing	£0	£0	N/A		Green	
Delivering the CO2 reductions											

Example Technology (T) Project 1	Replace Traffic Signals Across the City with LED Lamp Technology	Martin Wylie , Jason Taylor (funding)	High	High	Complete May 2010	£408k	N/A	Salix	400 tonnes	Green	**The LED traffic light and the IT project below will form over half of our of our annual CO2 emissions reduction target. Therefore there would only be an additional 470 tonnes of CO2 savings required for calendar year 2010/11 to achieve annual CO2 reduction target based on 2008/09 total emission figures (baseline year on Carbon Reduction Policy). This could be easily achieved via improved energy management measures detailed above in the carbon management section.**
Example Technology (T) Project 2	Change Central IT Server Settings to Allow Powerdown of Screens and PCs	ICT & Jason Taylor	High	High	Completio n Jan 2010	£0 already covered within SLA with ICT Capita	N/A	N/A	233 tonnes	Green	**The example projects here highlight the ease of achieving the 4% annual CO2 reduction target. There are huge opportunities to be found with minimal additional cost and utilising the match funded Salix monies. In addition savings can be achieved by improving energy management and incorporating energy efficiency within current and future work programmes i.e. plant replacement, refurbishment and rebuild. There are a number of planned Salix projects that will help achieve the annual reductions required in future years i.e. Civic Centre CHP.**

T1	Review current plant and equipment operations to ensure efficient use	Property Services and Site Managers	High	Medium	Ongoing	N/A	£0	N/A	1000s tonnes	Red	There are specific site managers across the councils responsible buildings that carry this out as a matter of course; however, all site managers and services should ensure that all buildings plant is optimised to maximise efficiency and reduce costs. This will need to be done in conjunction with Capita and service areas regarding control setting and making sure we do not have resultant (possibly Health & Safety or operational) issues.
T2	When electrical and mechanical equipment is replaced its replaced with high efficiency technology.	Service Area / Property Services	High	Medium	Ongoing	<5-7 year payback	Varying	R&M, Salix & Service Area	Varying	Green	This is already being undertaken on most projects. There should be only minimal marginal costs here if any at all. Where costs cannot be justified by budget holders it is suggested that Salix or other funding is considered to 'top up' to ensure high efficiency alternative. Paybacks will decide the final outcome i.e. < 5-7 year paybacks.
T3	Implement improved controls for plant and equipment	All Services / Salix and Service Area Funding	High	Medium	Ongoing	<5 year payback	Varying	R&M, Salix & Service Area	Varying	Amber	As R1 improving control and settings on controls will provide financial and CO2 savings.
T4	Improve thermal performance of the building fabric of council properties	All Services / Salix and Service Area Funding	High	Medium	Ongoing	<7 year payback	Varying	R&M, Salix & Service Area	Varying	Green	Salix is initially funding a number of sites including 4 schools and 4 non schools sites.
T5	Switch heating from oil to gas	R&M, Service Area	Medium	Low	Ongoing	<10 year payback	Varying	R&M, Salix & Service Area	Varying	Amber	E.g. Upper Shirely High School.
T6	Implement Gas CHP where the opportunity arises	Jason Taylor and Salix Fund	High	Medium	Ongoing	<7 year payback	Varying	Salix	Varying	Green	Feasibility work ongoing here.
T7	Implement biomass heating where the opportunity arises	All Services	High	Low	Ongoing	5+ year payback	Varying	External match	Varying	Amber	Feasibility work ongoing here.
T8	Large scale renewable CHP	Sustainability Team	High	Low	Ongoing	Unknown	N/A	N/A	10,000s tonnes	Amber	This is likely to come under City Wide non council funded measures; though could be likely as ABP is interested in this technology for Dock Gate 20 site.

T9	Building Schools for the Future Programme	Building Schools for the Future Team / Karl Limbert	High	High		£200 million		BSF	1000s tonnes	Amber	The schools projects highlighted here and below will need to ensure that consumption is reduced by incorporating energy efficiency or elimination within each sites brief. Liaison with the BSF team in underway.
T10	Primary Schools Improvements	Building Schools for the Future Team / Children's Services	High	High					1000s tonnes	Amber	As above
T11	Rationalisation of Buildings	All Services	High	High	Ongoing					Amber	This is being undertaken and we should continue to optimise our building use. Its likely that this process will reduce overall CO2 emissions.
Financing the commitment											
F1	Arrange the purchasing of carbon allowances	Alan Denford / Finance Team / All Services	Medium	Medium	Ongoing from April 2011	circa £320k	N/A	N/A	N/A	Green	Agreements have been made for allowance purchases with Alan Denford
F2	Identify key finance contacts for local monitoring	Finance Team / All Services	Low	Low	Ongoing from April 2012	N/A	N/A	N/A	N/A	Amber	
F3	Continue recycling the Salix fund to implement carbon reduction initiatives.	Jason Taylor / Finance	High	High	Ongoing	Total fund £408k			circa 400 tonnes each time fund is recycled.	Green	Agreements already formally in place to continue fund.